Jan. 19 - 1881

Alstes of
while Book

He expect the
Conference are
unprepared
before flower
opens

(Kew)

Jan. 13th /61/. Nectar in question — as seen in
Legum. & Laurel — see also Kurr for other
cases. — In Bracts & flowers later than age
when sun shines — sugar is highly oxidised,
& is not Oxygen exhaled when sun shines. —
Nectar is sought eagerly by many insects —
C. C. Sprengel. first saw that it is
excretion in various parts & organs within
flowers & it is of general presence in highly
organised plants (see Kurr) use of which
to the plant for attracting insects. —
He erred in supposing that then insects
often for self-fertilisation; though in many
(a) cases necessary for self-fertilisation & for
union of Dioicous plants. — The real value
as shown by many general considerations
is to ensure occasional cross. —
But how is it in other flowers, as Papilion. &

(6) hermaphr.
A plant not self-fertilising itself
& thus requiring insect agency,
is in perfect for same degree of
crossing

& Verbascum (Kurr) no nectar, yet then greatly

relatively visit — I suspect pollen-seekers do to good —

But there are such as pollen-eaters. as

pollen of which insects do not seem to feed — bees

wind both unites discovers & carries the.

hermaphrodite — Often have fertilized pistils —

without pollen in abundance — Dropping anthers —

open. natural flowers &c. — & no nectar. (see

Eva. oeconomia plants.)

Think of number of Insects which feed chiefly on

nectar ! !

Rec'd p. 129

p 133 v trade

Delphian

99 List of Plants without nectar

102 nectar rarely secreted before pollen shed
but lost afterwards

115 Cases of nectar secreted outside of flower
(Does not know of any cases)

124 Cases of Orchids which set no seed when
spurs cut off — but opposite cases given in

note
126. Vide tricolor bore seed when flowers cut the
petals bees do not see & are guided by
flowers — so with Cydonia latter

129 general conclusion from 441 experiments barely
Lepidium seeds —

131. Some orchids bore fruit when corolla cut off

133 V. tricolor bore fruit 135 General conclusion
that cutting the corolla did not prevent flowers
producing fruit. !

138 General conclusion of whole Book on
to
142. use of nectaries — also spill of use
Knows of use of Corpora.

Abstract of Kurr on Nectary (Jan 14 1861) 1

p. 17 Cyperaceae & Gramineae (Juncaceae) no nectar / Rheum has
Arum none. (false) — p. 34 Rumex, Atriplex. none
86 Platanus none.

25. Calyx of certain Iris secrete nectar

29. Lip of Butterfly orchis secretes before flower opens ||

29. Lip of ... secretion in Listera &c

28* Bracteae of certain other orchids secrete honey (lighter on)!

29 Cypripedium no nectar! when I gather I have seen Hive-Bees sucking

79 Polygala ~~on~~ vulgaris then has scarcely secretion in blossom. [illegible]

80 Viola same fact

39 Small flowers without nectar Veronicas (44 Myosotis) / 54 Galium 2 sp. & Asperula / 64 Epilobium hirsutum & montanum / 79 Stellaria & Sagina procumbens / 83 Draba verna /

40 Verbascum none (get cups naturally)

— Solanum tuberosum & [illegible] none

42 Syringa vulgaris none! (visited in our country?)

80 The fruitful flowers of Viola have no nectar or nectary — (perhaps self-fertilised)

85 In Cruciferae generally fertilisation in unopened flowers. — & strong after fertilisation = then seen in error = (they have the guiding mark of C.C. Sprengel)

86 Papaveraceae no nectar (except taking what bait is given to Bees.)

95. Amentaceae mostly no nectar. or Coniferae as strong in some of which good in several cases as Gramineae Cyperaceae.
& therefore when we see stamens & pollen strong that wind is agent no nectar